

SPECIES VIABILITY EVALUATION (SVE) PROCESS

White and Green Mountain National Forests

The Code of Federal Regulations (36 CFR 219.19) requires that the Forest Service manage fish and wildlife habitat “to maintain viable populations of existing native and desired non-native vertebrate species in the planning area. For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area.” USDA departmental regulations (9500-4) extend the requirement to manage for viable populations to “all existing native and desired non-native plants, fish, and wildlife species” (emphasis added).

To help meet these requirements, the White Mountain National Forest (WMNF) conducted a Species Viability Evaluation (SVE) as part of Forest Plan revision. This SVE was a qualitative process intended to identify and gather information about vertebrate, invertebrate, and plant species of potential viability concern on the Forest. The process described here was developed by biologists and botanists on the White Mountain and Green Mountain National Forests, based on Mighton et al (2000), and approved by both Forest Leadership teams. Other ways to address species viability were considered; this approach was determined to best meet the objectives of the Forests while meeting our legal requirements.

Information gathered through the SVE will be used to:

- 1) aid in alternative development for Forest Plan Revision,
- 2) track the effects of proposed alternatives on species viability,
- 3) provide the basis for project-level determinations regarding whether proposed management might affect species viability, and
- 4) update the Regional Forester’s Sensitive Species (RFSS) list after a new Forest Plan is approved and our management direction for the next planning cycle is in place (Forest Plan direction could determine which species are of potential viability concern).

Process to Identify Species of Potential Viability Concern

A list of more than 1100 plant and animal species that might be considered at-risk by individuals or entities with local wildlife or botanical resource knowledge was developed for the White Mountain and Green Mountain National Forests. Species evaluated included species that might occur on either Forest that were:

- on the federal endangered and threatened species list,
- on the Regional Forester’s Sensitive species list for either Forest,
- on the Vermont, New Hampshire, or Maine endangered, threatened, or species of concern lists,
- ranked by VT, NH, or ME as S1, S2, or S3,
- identified by the Northeast Endangered Species and Wildlife Diversity Technical Committee as of concern,
- identified as a priority species for conservation in Partners in Flight Bird Conservation Region 14,
- on the Flora Conservanda list of the New England Plant Conservation Program (NEPCoP) as division 1 or 2, or 3 in VT, NH, or ME, or
- proposed by one or more experts in the applicable field as a species of concern for either Forest.

Literature reviews were developed for more than 470 species; input from local experts was gathered on just over 320 species through informal panels. A Forest Service biologist and botanist used information from the literature reviews and expert panels, and their own professional judgment to decide which

species to drop and which to carry forward in the evaluation process. The initial list was reviewed to determine which species are known or have potential to occur on one or both Forests, and for which viability is currently a concern or may become a concern in the next planning cycle (10-20 years). Species were dropped from consideration for one of two reasons:

- occurrence on either Forest was not likely, or
- information indicated that viability is not currently at high risk and is not likely to become a concern in the near future.

The resulting WMNF list included only those species likely to occur on the Forest whose viability, range-wide or on the Forest, is at high risk now or in the next 20 years, or whose viability might become a concern depending on factors that WMNF management could impact. Species that were dropped from the SVE process were addressed through indicator species or ecosystem health aspects of Forest Plan revision and forest management.

Effects Analysis

Based on information provided throughout the process, the potential impacts of each alternative on species of potential concern were analyzed. Federally endangered or threatened species and Regional Forester's sensitive species were addressed in detail in the Biological Evaluation. In the EIS, all species tracked through the SVE process were linked to one of ten habitat groups. Current condition, threats, and potential direct, indirect, and cumulative impacts were addressed for each habitat group. For each species, number of known occurrences and differences from information provided for the habitats were identified, including any additional impacts. A determination was made for each species of whether each alternative would increase or decrease the risk to viability for the species in the planning area.

Information on Species of Potential Viability Concern

The Forest is making information on each of the species on the SVE species list available to the public. The simplest source of information is the SVE list in an excel spreadsheet. The spreadsheet provides the following information on each species:

- Scientific name and synonyms
- Common name
- Global and national ranking
- State ranking and listing status
- Whether it is a Regional Forester's Sensitive Species for the WMNF
- Whether it is known or likely to occur on the WMNF
- Summary of habitat preferences
- Comments that helped determine whether the species should be on the SVE list

A source of more detailed information for each species is a species summary, which covers status, distribution, habitat needs, limiting factors, viability concerns, and potential Forest management activities that might affect viability. This information is a summary of the information compiled in the literature review and expert panel for each species. Where needed, interpretations of the available information were made to highlight content applicable to northern New England and to determine what management activities might affect a species. If new information comes available during the Forest Plan revision process, these summaries will be updated as necessary.

For some species there is limited information and many unknowns. Knowledge gaps and disagreements between sources are noted where they might influence our impact analysis. Outcomes discussed in the status and viability concern sections are described below and in a separate document that is available with the summaries. For some species, the information available is not enough to reach a strong conclusion about management effects or long-term viability, but it is the best available information according to the literature and local biologists and botanists.

References listed for each species represent those supplying the most applicable information for the summary and may not include all references used in the species viability evaluation process. Additional information sources are referenced in the literature reviews that were the basis for this summary, which are part of the Forest Plan revision project record.

Species summaries are still being developed for some species. As summaries are completed, they will be placed on the Forest's website and made available to people who have requested them. We did not want to wait until everything was complete to make the list and those summaries that are done available to you.